

Event Hub Coolness and You

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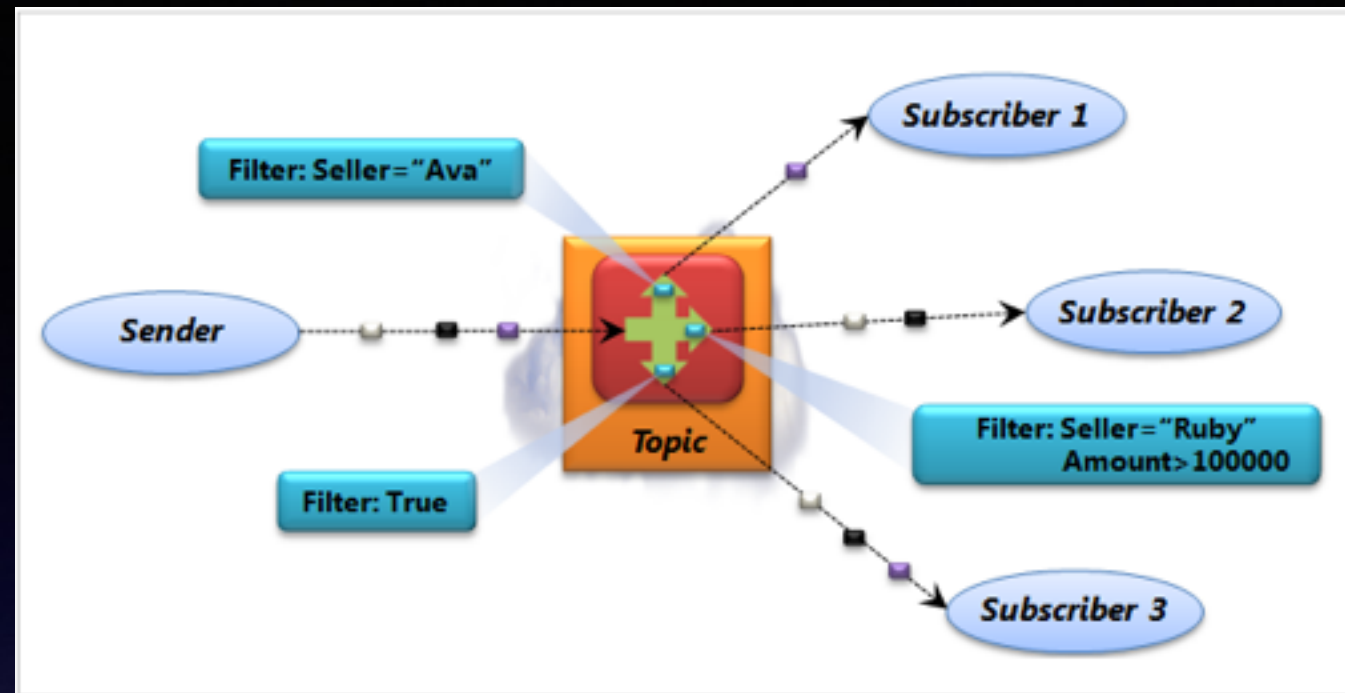
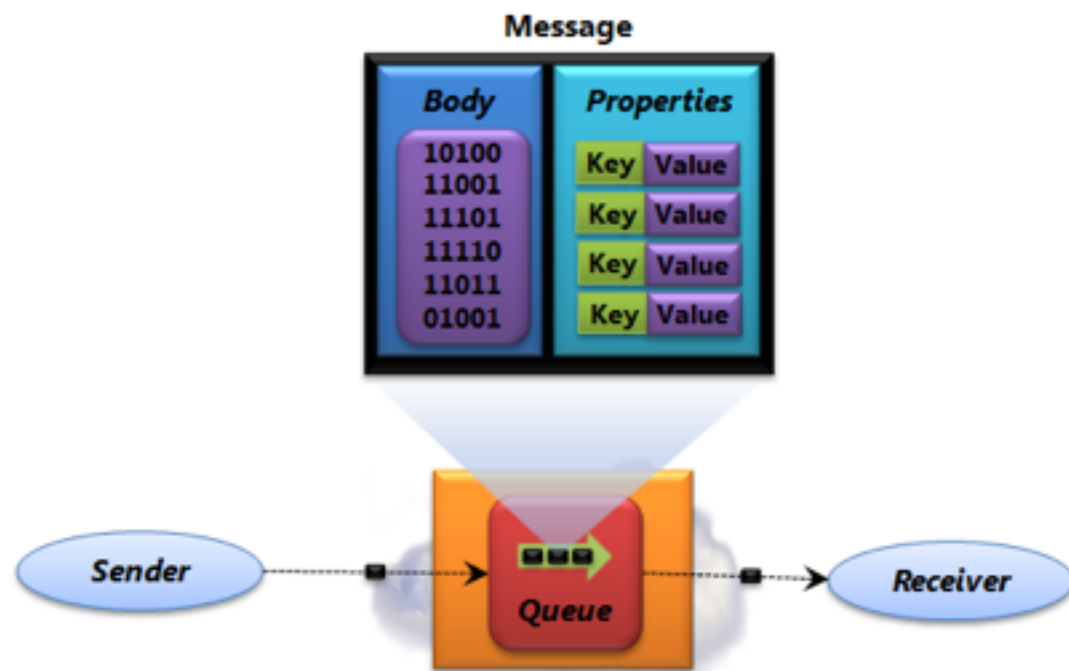
- Need to collect a ton of data
- Need to collect data from a ton of devices
- Need to collect data on my mobile app that is killin' it!
- My new IoT device has to log somewhere.
- I care about the order of things.
- Shipping logs around and merging



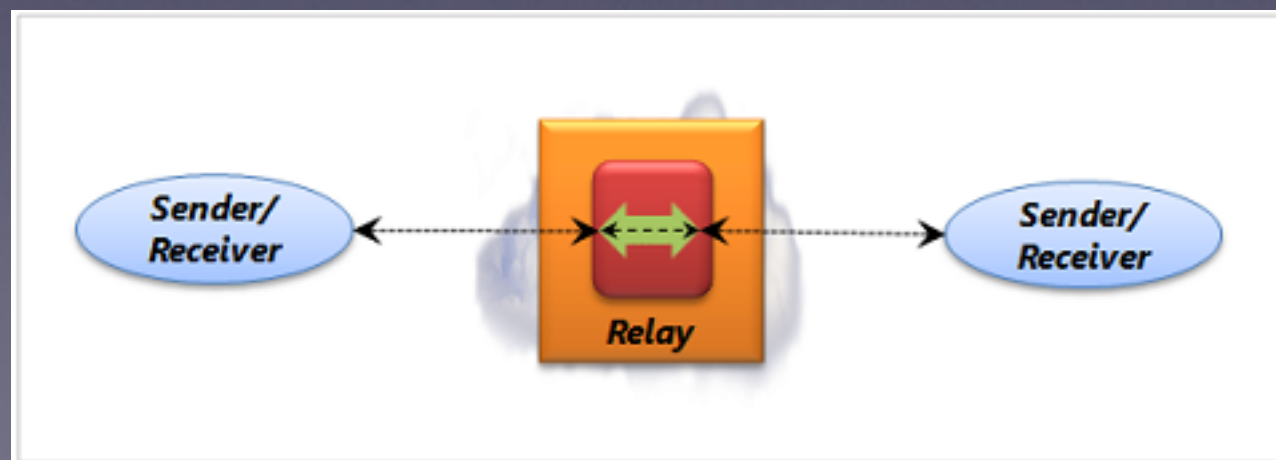
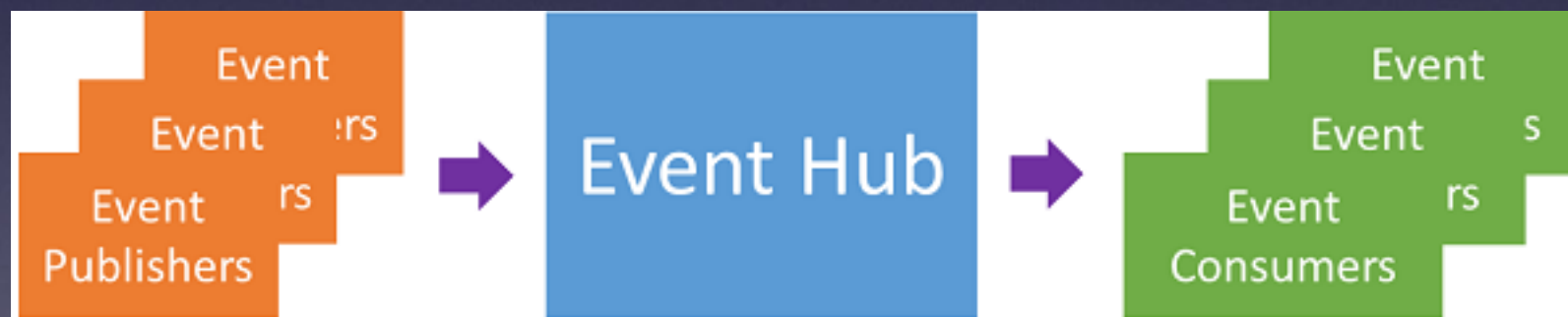
How does this fit?

- Part of the Azure Service Bus offering.
- Designed for high speed input/output.
- Queues and Topics are too heavy and not really fast enough.
- Based on AMQP and open source standard





Service Bus



Open standards?

- What is AMQP
- How long has it been around
- Who else uses this stuff?
- What platforms are supported?
- SwiftMQ, a JMS, AMQP 1.0 and AMQP 0.9.1 broker (free and commercial) and a free AMQP 1.0 client.
- Windows Azure Service Bus, Microsoft's cloud-based messaging service
- Apache Qpid
- Apache ActiveMQ
- Apache Apollo
- RabbitMQ
- IBM MQ Light



Cool, any limits?



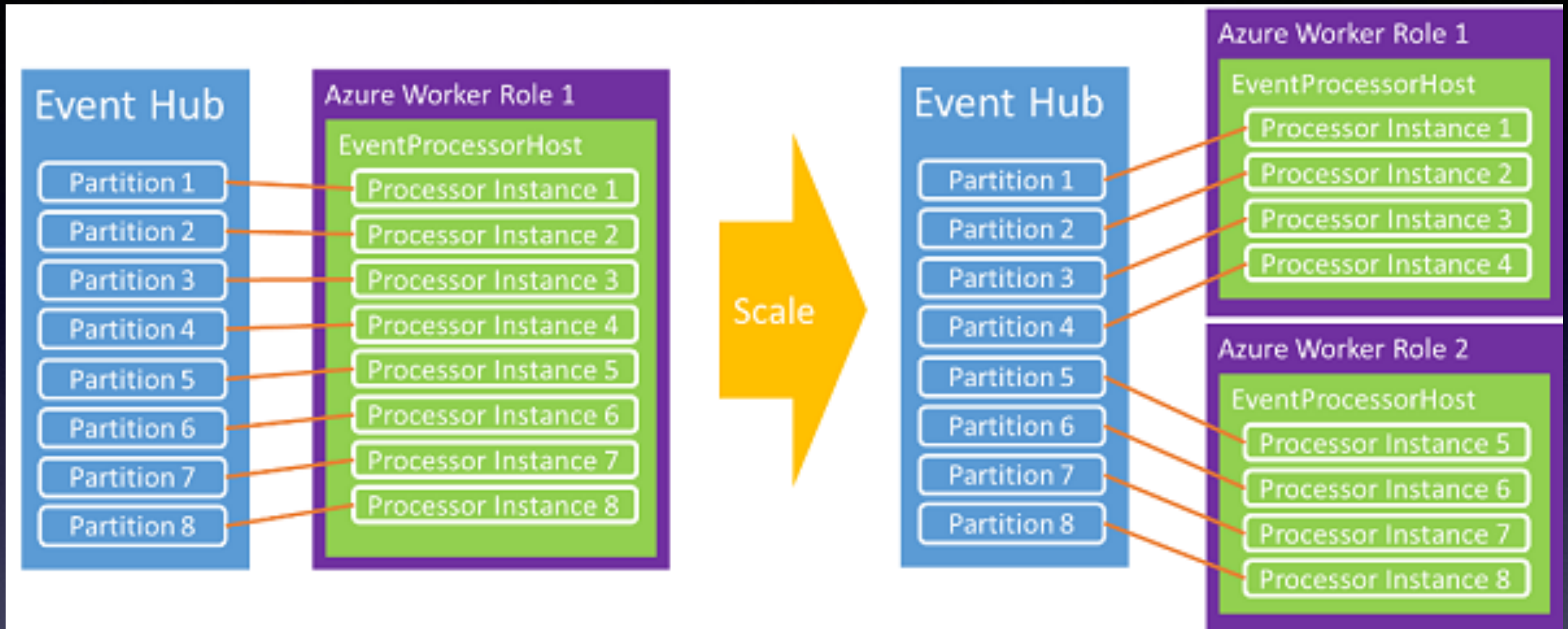
- 1 day retention
- Ingres: 1MBps or a 1000 events per second.
- Egres: 2 MBps
- Maximum size of a single event: 256KB

Can I get more?

- Single up to 20 units
- A single partition can do 1 unit
- You should not have more units than you have partitions(consumers).

Set it on your config page.

Anything over 20 and you have to call Microsoft



What's a partition?

What's the cost?

	BASIC	STANDARD
Ingress events	\$0.028 per million events	\$0.028 per million events
Throughput unit (1 MB/s ingress, 2MB/s egress)	\$0.015/hr (~\$11/mo)	\$0.03/hr (~\$22/mo)
Publisher policies	--	✓
Consumer groups	1 - Default	20
Message replay	✓	✓
Maximum throughput units	20	20
Service Bus brokered connections	100 included	1,000 included
Additional Service Bus brokered connections	--	✓
Message Retention	1 day included	1 day included
Additional storage (up to 7 days)	--	✓

Monthly price estimates are based on 744 hours of usage. Event Hubs Basic includes 100 Service Bus brokered connections per Service Bus namespace and the

Hey lets something!

Azure Account

Visual Studio 2013 community or better

Creating an Event Hub

- Depends on how many you want reading
- Maximum 32
- How many days to retain
- Don't use the Root, create a reader and writer
- Create a storage account for partition reader coordination. The processor needs this.

Demo Time

Links

- Sign up: <http://azure.microsoft.com/en-us/services/event-hubs/>
- Overview: <https://azure.microsoft.com/en-us/documentation/articles/event-hubs-overview/>
- AMQP: https://en.wikipedia.org/wiki/Advanced_Message_Queueing_Protocol
- Service Bus Explorer: <https://github.com/paolosalvatori/ServiceBusExplorer>

- Dan Rosanova: <https://channel9.msdn.com/Shows/Azure-Friday/Azure-Service-Bus-Event-Hubs-101-with-Dan-Rosanova>
- Dan Rosanova: <https://channel9.msdn.com/Shows/Azure-Friday/Scaling-out-Azure-Service-Bus-Event-Hubs-102-with-Dan-Rosanova>
- Elio Damaggio: <https://azure.microsoft.com/en-in/documentation/articles/event-hubs-csharp-ephcs-getstarted/>
- My example: <https://github.com/pulcher/AzurePlay>